

Roy Gibson
CP2-4C07

12/26/02


Roy:

Attached are the results to your request regarding a method of cooling the cortex to treat neocortical seizures.

I found few relevant cites and the best are in the non-patent literature. I found two citations by the inventor regarding the use of the Peltier device and I found an article from 1995 in the full-text patent literature that references an article entitled "Changes of electrocorticography activity in response to direct brain surface cooling in epileptic patients." That article was published in 1979.

If you'd like this search reworked in any way, please don't hesitate to contact me at 305-8587 or Julie.walko@uspto.gov.

Sincerely,


Julie Walko
CP2 2C08

* 13/3,K/1 (Item 1 from file: 442)
 DIALOG(R)File 442:AMA Journals
 (c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.
 00095974
 COPYRIGHT American Medical Association 1995
**Intraoperative Hippocampal Cooling and Wada Memory Testing in the
 Evaluation of Amnesia Risk Following Anterior Temporal Lobectomy (ARTICLE)**
 LEE, GREGORY P.; LORING, DAVID W.; SMITH, JOSEPH R.; FLANIGIN, HERMAN F.
 Archives of Neurology
 Sep, 1995; Original Contribution: ne_857
 LINE COUNT: 00430

...430-439.

29.
 Pasztor E, Tomka I. Changes of electrocorticography activity in
 response to direct brain surface cooling in epileptic patients. Acad
 Sci Hung Acta Physiol. 1979;36:277-292.
 30.
 Varney NR, Benton AL...

13/3,K/2 (Item 2 from file: 442)
 DIALOG(R)File 442:AMA Journals
 (c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.
 00055782
The Current State of Psychiatry in the Treatment of Violent Patients (
Article)
 Tardiff, Kenneth MD, MPH
 Archives of General Psychiatry
 1992; 49: 493 (7)

13/3,K/3 (Item 3 from file: 442)
 DIALOG(R)File 442:AMA Journals
 (c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.
 00052680
Legalization of Drugs of Abuse and the Pediatrician (Article)
 Schwartz, Richard H. MD
 American Journal of Diseases of Children
 1991; 145: 1153 (6)

13/3,K/4 (Item 4 from file: 442)
 DIALOG(R)File 442:AMA Journals
 (c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.
 00052435
Oral Water Intoxication in Infants: An American Epidemic (Article)
 Keating, James P. MD, MSci(Epidem); Gregory J. Schears, MD; Philip R.
 Dodge, MD
 American Journal of Diseases of Children
 1991; 145: 985 (6)

7 13/3,K/5 (Item 5 from file: 442)
 DIALOG(R)File 442:AMA Journals
 (c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.
 00050646

Drug Treatment of Alzheimer's Disease (Article)

Cooper, James K., MD
Archives of Internal Medicine
1991; 151: 245 (5)

...on some neurons of increasing oxygen utilization (they can, for example, restore the electroencephalogram in **cooled brains** to normal). /25/ A better explanation for the potential effectiveness of ergot mesylate compound may... clinical evaluations concluded that neuroleptics are significantly more useful than placebo. /60/ Physicians seem to **find** neuroleptics useful despite the advice to minimize neuroleptic use. A group from Vanderbilt University, Nashville...

... is more likely in drugs that also have anticholinergic effects. Other neuroleptic side effects include **seizures** , inappropriate secretion o antidiuretic hormone, jaundice, and weight gain. Anxiolytics Anxiolytics are minor tranquilizers, chiefly...

13/3,K/6 (Item 6 from file: 442)
DIALOG(R)File 442:AMA Journals
(c)2002 Amer Med Assn -FARS/DARS apply. All rts. reserv.

00026003

✓ Copyright (C) 1983 American Medical Association
Brain Electrical Activity Mapping (BEAM) in Schizophrenic Patients (ORIGINAL ARTICLE)

MORIHISA, JOHN M.; DUFFY, FRANK H.; WYATT, RICHARD J.
Archives of General Psychiatry
July, 1983; 40: 719-728
LINE COUNT: 00529 WORD COUNT: 07305

CITED REFERENCES:

...Publishers, 1979, pp 152-180.

13. Lombroso CT, Duffy FH: Brain electrical activity **mapping** as an adjunct to CT scanning, in Canger R, Angeleri F, and Penry JK (eds): **Advances in Epileptology : 11th Epilepsy International Symposium**. New York, Raven Press, 1980, pp 83-88.

16. Lombroso CT, Duffy FH: Brain electrical activity **mapping** in the **epilepsies** , in Akimoto H, Kajamatsuri H, Seino M, et al (eds): **Advances in Epileptology : The 13th Epilepsy International Symposium**. New York, Raven Press, 1982, pp 173-179.

13/3,K/7 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2002 FIZ TECHNIK. All rts. reserv.

01522983 20010602033

Wear maps for manufacturing and automotive engineering applications

(Verschleisskarten fuer die Produktion und den Kraftfahrzeugbau)

Wilson, S; Riahi, AR; Alpas, AT

Innovation Centre, Vancouver, CDN; Univ. of Windsor, CDN

Environmental Conscious Materials - Ecomaterials, Proc. of the Internat. Symp., 39th Annual Conf. of Metallurgists of CIM, Ottawa, CDN, Aug 20-23, 20002000

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 1-894475-04-6

13/3,K/8 (Item 1 from file: 98)

DIALOG(R)File 98:General Sci Abs/Full-Text

(c) 2002 The HW Wilson Co. All rts. reserv.

04272143 H.W. WILSON RECORD NUMBER: BGSA00022143 (USE FORMAT 7 FOR FULLTEXT)

The cell-phone scare.

Taubes, Gary

Technology Review (Cambridge, Mass.: 1998) v. 103 no6 (Nov./Dec. 2000) p. 117-19

SPECIAL FEATURES: il ISSN: 1099-274X

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

WORD COUNT: 1839

13/3,K/9 (Item 1 from file: 149)

DIALOG(R)File 149:TGG Health&Wellness DB(SM)

(c) 2002 The Gale Group. All rts. reserv.

01988164 SUPPLIER NUMBER: 73021916 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Abstinence.

Yamey, Gavin

The Western Journal of Medicine, 174, 3, 202

March, 2001

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0093-0415

LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 345 LINE COUNT: 00032

13/3,K/10 (Item 2 from file: 149)

DIALOG(R)File 149:TGG Health&Wellness DB(SM)

(c) 2002 The Gale Group. All rts. reserv.

01844854 SUPPLIER NUMBER: 55087969 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Abstracts of the European Association of Poisons Centres and Clinical

Toxicologists XIX International Congress. (Abstract)

Journal of Toxicology: Clinical Toxicology, 37, 3, 353

April, 1999

DOCUMENT TYPE: Abstract PUBLICATION FORMAT: Magazine/Journal; Refereed

ISSN: 0731-3810 LANGUAGE: English RECORD TYPE: Fulltext

TARGET AUDIENCE: Professional

WORD COUNT: 54708 LINE COUNT: 04684

13/3,K/11 (Item 3 from file: 149)

DIALOG(R)File 149:TGG Health&Wellness DB(SM)

(c) 2002 The Gale Group. All rts. reserv.
01703240 SUPPLIER NUMBER: 19559729 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Environmental heat-related illnesses.
Davis, Linda L.
MedSurg Nursing, v6, n3, p153(7)
June, 1997
PUBLICATION FORMAT: Magazine/Journal LANGUAGE: English RECORD TYPE:
Fulltext; Abstract TARGET AUDIENCE: Professional
WORD COUNT: 3084 LINE COUNT: 00335

13/3,K/12 (Item 4 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2002 The Gale Group. All rts. reserv.
01641430 SUPPLIER NUMBER: 18731204 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Random, suspicionless drug testing of high school athletes. (Supreme Court Review) (Case Note)
Shutler, Samantha Elizabeth
Journal of Criminal Law and Criminology, 86, n4, 1265-1303
Summer, 1996
DOCUMENT TYPE: Case Note PUBLICATION FORMAT: Magazine/Journal ISSN:
0091-4169 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
TARGET AUDIENCE: Academic; Professional
WORD COUNT: 17407 LINE COUNT: 01471

13/3,K/13 (Item 5 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2002 The Gale Group. All rts. reserv.
01605275 SUPPLIER NUMBER: 17411904 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Spontaneous periodic hypothermia.
Kloos, Richard T.
Medicine, v74, n5, p268(13)
Sept, 1995
PUBLICATION FORMAT: Magazine/Journal ISSN: 0025-7974 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 10196 LINE COUNT: 00862

13/3,K/14 (Item 6 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2002 The Gale Group. All rts. reserv.
01431038 SUPPLIER NUMBER: 14655661 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Possible time-dependent sensitization to xenobiotics: self-reported illness from chemical odors, foods, and opiate drugs in an older adult population.
Bell, Iris R.; Schwartz, Gary E.; Peterson, Julien M.; Amend, Diane; Stini, William A.
Archives of Environmental Health, v48, n5, p315(13)
Sept-Oct, 1993
PUBLICATION FORMAT: Magazine/Journal ISSN: 0003-9896 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional

WORD COUNT: 10254 LINE COUNT: 00876

13/3,K/15 (Item 7 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2002 The Gale Group. All rts. reserv.

01418054 SUPPLIER NUMBER: 13778813 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Current concepts in cerebral protection.
Kelly, Brian J.; Luce, John M.
Chest, v103, n4, p1246(9)
April,1993
PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 5055 LINE COUNT: 00575

13/3,K/16 (Item 8 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2002 The Gale Group. All rts. reserv.

01281172 SUPPLIER NUMBER: 10764382
Induction of speech arrest and counting errors with rapid-rate transcranial magnetic stimulation.
Pascual-Leone, Alvaro; Gates, John R.; Dhuna, Anil
Neurology, v41, n5, p697(6)
May,1991
PUBLICATION FORMAT: Magazine/Journal ISSN: 0028-3878 LANGUAGE: English
RECORD TYPE: Abstract TARGET AUDIENCE: Academic; Professional

...using transcranial brain stimulation, it may be of great advantage in the treatment of severe **epilepsy** . This possibility was explored in six adult **epileptic** patients using a specially water- **cooled** magnetic stimulator capable of stimulating at an especially high rate, 25 times per second. The...

Set	Items	Description
S1	25269	SEIZ? OR EPILEP? OR ANTIEPILEP?
S2	52780	COOL? OR PELTIER?
S3	481936	MAP? ? OR MAPPING? ? OR MAPPED OR LOCAT? OR IDENTIF? OR FI-ND? ?
S4	96583	BRAIN? ? OR CORTEX OR NEOCORT?
S5	142	S4(5N)S2
S6	2	S5(S)S1
S7	2	RD (unique items)
S8	114	S1(S)S2
S9	17	S8(S)S3
S10	18	S9 OR S7
S11	17	RD (unique items)
S12	16	S11 NOT PY>2001
S13	16	S12 NOT PD>20010504

? show files

File 441:ESPICOM Pharm&Med DEVICE NEWS 2002/Dec W3
(c) 2002 ESPICOM Bus.Intell.

File 442:AMA Journals 1982-2002/Jan B1
(c)2002 Amer Med Assn -FARS/DARS apply

File 444:New England Journal of Med. 1985-2002/Dec W4
(c) 2002 Mass. Med. Soc.

File 95:TEME-Technology & Management 1989-2002/Dec W2
(c) 2002 FIZ TECHNIK

File 98:General Sci Abs/Full-Text 1984-2002/Nov
(c) 2002 The HW Wilson Co.

File 135:NewsRx Weekly Reports 1995-2002/Dec W3
(c) 2002 NewsRx

File 149:TGG Health&Wellness DB(SM) 1976-2002/Dec W2
(c) 2002 The Gale Group

File 369:New Scientist 1994-2002/Dec W3
(c) 2002 Reed Business Information Ltd.

File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS

*
10/5/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

13157975 BIOSIS NO.: 200100365124

Focal cooling rapidly terminates experimental neocortical seizures.

AUTHOR: Yang Xiao-Feng; Rothman Steven M(a)

AUTHOR ADDRESS: (a)Department of Neurology, St. Louis Children's Hospital,
1 Children's Place, St. Louis, MO, 63110: rothman@kids.wustl.edu**USA

JOURNAL: Annals of Neurology 49 (6):p721-726 June, 2001

MEDIUM: print

ISSN: 0364-5134

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: The efficacy of surgical resection for epilepsy is considerably lower for neocortical epilepsy than for temporal lobe epilepsy. We have explored focal cooling with a thermoelectric (Peltier) device as a potential therapy for neocortical epilepsy. After creating a cranial window in anesthetized rats, we induced seizures by injecting artificial cerebrospinal fluid containing 4-aminopyridine (4-AP), a potassium channel blocker. Within 30 minutes of 4-AP injection, animals developed recurrent seizures (duration 85.7 +/- 26.2 seconds; n = 10 rats) that persisted for 2 hours. When a small Peltier device cooled the exposed cortical surface to 20-25degreeC at seizure onset, the seizure duration was reduced to 8.4 +/- 5.0 seconds (n = 10 rats; p < 0.001). When the Peltier device was placed close to the cortical surface, but not allowed to make physical contact, there was no effect on seizure duration (104.3 +/- 20.7 seconds; p > 0.05 compared to control). Interestingly, the duration of uncooled seizures was reduced after we allowed the **cortex** to rewarm from prior **cooling**. Histological examination of the **cortex** after **cooling** has shown no evidence of acute or delayed neuronal injury, and blood pressure and temperature remained stable. It may be possible to use Peltier devices for cortical **mapping** or, when **seizure** detection algorithms improve, for chronic **seizure** control.

* *
10/5/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

12868450 BIOSIS NO.: 200100075599

Rapid termination of focal neocortical seizures with a peltier device.

AUTHOR: Yang X F(a); Rothman S M

AUTHOR ADDRESS: (a)Washington University, St. Louis, MO**USA

JOURNAL: Society for Neuroscience Abstracts 26 (1-2):pAbstract No-8018
2000

MEDIUM: print

CONFERENCE/MEETING: 30th Annual Meeting of the Society of Neuroscience New Orleans, LA, USA November 04-09, 2000

SPONSOR: Society for Neuroscience

ISSN: 0190-5295

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: The management of neocortical seizures remains suboptimal despite improvements in electrodiagnostic techniques and neuroimaging. The functional consequences of cortical resection can be uncertain, and the efficacy of neocortical resection is considerably lower than temporal lobe resection. We are exploring the use of focal cooling with a thermoelectric (Peltier) device as an alternative therapy for intractable neocortical epilepsy. After creating a 5 x 10 mm cranial window in halothane anesthetized rats, we induced seizures by injecting 0.5 μ l artificial cerebrospinal fluid containing 4-aminopyridine (4-AP; 25 mM), a potassium channel blocker. Within 30 minutes of 4-AP injection, control animals developed recurrent clinical and electrographic seizures (108.4 \pm 3.6 sec; n=5 rats) that persisted for 2 hours. No seizures were seen after injection of artificial CSF alone. When a Peltier device (3.5 x 7 mm) cooled the exposed cortical surface to 20-25°C at seizure onset, the seizure duration was reduced to 11.2 \pm 5.7 sec (n=5 rats; p<0.01). If the Peltier device was placed less than 0.5 mm from the cortical surface, but not allowed to make direct physical contact and **cool the cortex**, there was no effect on **seizure** duration (104.3 \pm 20.7 sec; p>0.05 compared to control). Interestingly, the duration of uncooled **seizures** was reduced after allowing the **cortex** to rewarm from prior cortical **cooling** (74.0 \pm 10.2 sec; p<0.01). Histological examination of the **cortex** after **cooling** has shown no evidence of acute neuronal injury and blood pressure and temperature remained stable. It may be possible to use Peltier devices for cortical **mapping**, or, when **seizure** detection algorithms improve, for chronic **seizure** control.

10/5/3 (Item 3 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

03930873 BIOSIS NO.: 000076016439

CHANGES IN HEART RHYTHM DURING HYPER ACTIVATION OF THE ANTERIOR AMYGDALOID NUCLEUS

AUTHOR: KRYZHANOVSKII G N; PIVOVAROV YU I

AUTHOR ADDRESS: LAB. GEN. PATHOL. NERV. SYST., INST. GEN. PATHOL. PATHOPHYSIOL., ACAD. MED. SCI. USSR, MOSCOW, USSR.

JOURNAL: BYULL EKSP BIOL MED 93 (5). 1982. 26-29. 1982

FULL JOURNAL NAME: Byulleten' Eksperimental'noi Biologii i Meditsiny

CODEN: BEBMA

RECORD TYPE: Abstract

LANGUAGE: RUSSIAN

ABSTRACT: In experiments on random-bred rats, a generator of pathologically enhanced excitation (GPEE) **located** in the anterior amygdaloid nucleus caused cardiac rhythm abnormalities (bradysystole). These effects were realized via the vagus nerves. Discharges of the **epileptic** activity in the GPEE correlated with breaks of electric activity in the vagus (the central terminal) and cardiac complex loss. Coagulation of the GPEE area in the amygdala and **brain cooling**, which resulted in disappearance of GPEE activity, led to the recovery of normal cardiac rhythm. The role of the central determinant structures in the pathology of visceral function regulation was discussed.

10/5/4 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2002 Inst for Sci Info. All rts. reserv.

07019960 Genuine Article#: 115TM Number of References: 207

Title: **Functional imaging of the brain by infrared radiation
(thermoencephaloscopy)**

Author(s): Shevelev IA (REPRINT)

Corporate Source: RUSSIAN ACAD SCI, INST HIGHER NERVOUS ACT & NEUROPHYSIOL,
DEPT SENSORY PHYSIOL/MOSCOW 117865//RUSSIA/ (REPRINT)

Journal: PROGRESS IN NEUROBIOLOGY, 1998, V56, N3 (OCT), P269-305

ISSN: 0301-0082 Publication date: 19981000

Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE,
KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Language: English Document Type: REVIEW

Geographic Location: RUSSIA

Subfile: CC LIFE--Current Contents, Life Sciences;

Journal Subject Category: NEUROSCIENCES

Abstract: A technique for thermal imaging of the animal and human brain
cortex using an infrared optical system is described.

Thermoencephaloscopy (TES) is based on improved thermovision and image processing techniques and allows two-dimensional, contact-free, dynamic and non-invasive recording of background and evoked cortical activity through an unopened skull. Activated (heated) and deactivated (**cooled**) zones of the cerebral **cortex** are revealed. The instrumental temporal resolution of TES is 40 msec (25 **maps** sec(-1)), the spatial resolution is up to 70 x 70 pm pixel(-1). The diameter of the smallest recordable active region of the cortex is 200-300 mu m. TES allows to detect the position, size and sequence of activation of precisely **located** specific cortical zones, and to measure their dynamics before, during and after sensory and direct cortical stimulation, motor acts and conditioning (associative learning). TES effects were recorded in rats, rabbits, cats, monkeys and humans. Waves were found spreading over the cortex with a speed up to 33 mm sec(-1) along trajectories specific for the sensory modality and the site of stimulation. Some pathological processes in the brain are detectable by TES: spreading depression; stress; catalepsy; experimental tumors; and **epileptic** focuses. The main mechanisms of thermal responses recorded by TES are discussed: neural activity; local metabolism of units; local cerebral blood flow, and thermoconductivity in the activated zones of the cortex. Thermoencephaloscopy is a dynamic, non-invasive, contact-free, comparatively cheap, simple and inexpensive method of neuroimaging with a relatively high temporal and spatial resolution and sensitivity. It can be a useful tool in basic neuroscience and medicine. (C) 1998 Elsevier Science Ltd. All rights reserved.

10/5/5 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2002 Elsevier Science B.V. All rts. reserv.

05281790 EMBASE No: 1993049875

Temperature topography of the brain cortex: Thermoencephaloscopy

Shevelev I.A.

Department of Sensory Physiology, Institute of Higher Nervous Activity,

Neurophysiology, 5a Butlerova Str, Moscow 117864 Russian Federation
Brain Topography (BRAIN TOPOGR.) (United States) 1992, 5/2 (77-85)
CODEN: BRTOE ISSN: 0896-0267
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Thermoencephaloscopy (TES) - a new method of functional imaging of the cerebral cortex by its infrared radiation was advanced and developed since 1984. Improved thermovision and image processing techniques allow 2D, contact-free, dynamic and non-invasive recording of background and evoked cortical activity through an unopened skull. Activated (heated) and deactivated (**cooled**) zones of the cerebral **cortex** are revealed. The temporal resolution of TES is 40 msec (25 **maps** /sec), the spatial resolution is up to 70 x 70 microns/pixel. The diameter of the smallest recordable active region of the cortex is 200-300 microns. The minimal time needed for a session used for averaging of 4-9 responses varied from 40 sec up to 18 min. TES allows to detect the position, size and sequence of operation of precisely **located** specific cortical zones, and to measure their dynamics before, during and after sensory and direct cortical stimulation, motor acts and conditioning (associative learning). TES-effects were recorded in rats, rabbits, cats, monkeys and humans. Waves were found spreading over the cortex with a speed of up to 30 mm/sec along trajectories specific for the sensory modality and the site of stimulation. Some pathological processes in the brain are detectable by TES: experimental tumours and **epileptic** foci. There are many sources for local heating: neural activity, local metabolism of units, local cerebral blood flow and thermoconductivity in the activated zones of the cortex. Thermoencephaloscopy is a dynamic, non-invasive, contact-free method with a relatively high temporal and spatial resolution and sensitivity. It can be a useful tool in basic neuroscience and medicine.

Set	Items	Description
S1	494952	SEIZ? OR EPILEP? OR ANTIEPILEP?
S2	790401	COOL? OR PELTIER?
S3	8326535	MAP? ? OR MAPPING? ? OR MAPPED OR LOCAT? OR IDENTIF? OR FI-ND? ?
S4	3375792	BRAIN? ? OR CORTEX OR NEOCORT?
S5	2838	S4(5N)S2
S6	71	S5(S)S1
S7	34	RD (unique items)
S8	7	S7(S)S3
S9	6	S8 NOT PY>2001
S10	5	S9 NOT PD>20010504

? show files

File 2:INSPEC 1969-2002/Dec W3
(c) 2002 Institution of Electrical Engineers

File 5:Biosis Previews(R) 1969-2002/Dec W4
(c) 2002 BIOSIS

File 6:NTIS 1964-2002/Dec W4
(c) 2002 NTIS, Intl Cpyrght All Rights Res

File 8:Ei Compendex(R) 1970-2002/Dec W3
(c) 2002 Elsevier Eng. Info. Inc.

File 34:SciSearch(R) Cited Ref Sci 1990-2002/Dec W5
(c) 2002 Inst for Sci Info

File 35:Dissertation Abs Online 1861-2002/Nov
(c) 2002 ProQuest Info&Learning

File 65:Inside Conferences 1993-2002/Dec W4
(c) 2002 BLDSC all rts. reserv.

File 73:EMBASE 1974-2002/Dec W4
(c) 2002 Elsevier Science B.V.

File 74:Int.Pharm.Abs. 1970-2002/Dec
(c) 2002 Amer.Soc.of Health-System Pharm.

File 92:IHS Intl.Stds.& Specs. 1999/Nov
(c) 1999 Information Handling Services

File 94:JICST-EPlus 1985-2002/Oct W3
(c)2002 Japan Science and Tech Corp(JST)

File 144:Pascal 1973-2002/Dec W4
(c) 2002 INIST/CNRS

File 155:MEDLINE(R) 1966-2002/Nov W3

File 158:DIOGENES(R) 1976-2002/Dec W4
(c) 2002 DIOGENES

File 172:EMBASE Alert 2002/Dec W4
(c) 2002 Elsevier Science B.V.

File 187:F-D-C Reports 1987-2002/Dec W3
(c) 2002 F-D-C Reports Inc.

File 188:Health Devices Sourcebook 2002
ECRI (A nonprofit agency)

File 198:Health Devices Alerts(R) 1977-2002/Dec W5
(c) 2002 ECRI-nonprft agncy

File 399:CA SEARCH(R) 1967-2002/UD=13726
(c) 2002 American Chemical Society

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info

File 48:SPORTDiscus 1962-2002/Dec
(c) 2002 Sport Information Resource Centre

File 71:ELSEVIER BIOBASE 1994-2002/Dec W4
(c) 2002 Elsevier Science B.V.

File 91:MANTIS(TM) 1880-2002/Oct
2002 (c) Action Potential

File 162:CAB Health 1983-2002/Nov
(c) 2002 CAB International

File 164:Allied & Complementary Medicine 1984-2002/Dec

(c) 2002 BLHCIS
File 467:ExtraMED(tm) 2000/Dec
(c) 2001 Informania Ltd.

10/5,K/1 (Item 1 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
(c) 2002 WIPO/Univentio. All rts. reserv.

00956003 **Image available**

SYSTEM AND METHOD FOR COOLING THE CORTEX TO TREAT NEOCORDICAL SEIZURES
SYSTEME ET PROCEDE DE REFROIDISSEMENT DU CORTEX DESTINES A TRAITER DES
CRISES NEOCORTICALES

Patent Applicant/Assignee:

THE WASHINGTON UNIVERSITY, Center of Technology Management, 660 South
Euclid, Box 8013, Saint Louis, MO 63110, US, US (Residence), US
(Nationality)

Inventor(s):

ROTHMAN Steven M, 26 Ridgemoor, Saint Louis, MO 63105, US,

Legal Representative:

ROSENBERG Matthew A (agent), Blumenfeld, Kaplan & Sandweiss, P.C., Suite
400, 168 North Meramec Avenue, Saint Louis, MO 63105, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200289685 A2 20021114 (WO 0289685)

Application: WO 2002US14109 20020503 (PCT/WO US0214109)

Priority Application: US 2001288944 20010504

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

English Abstract

A manually activated **Peltier** device was placed in direct contact with a cortical slice. **Seizures** terminated within seconds of the onset of **cooling**, sometimes preceding a detectable drop in temperature measured near the top of the slice. Activation of the **Peltier** did not stop **seizures** when slices were no longer in direct physical contact with the device, indicating that this was not a field effect. When **cooling** was shut off and temperature returned to 33 degreesC, the bursting sometimes returned, but a longer term suppressive effect on **seizure** activity could be observed. In two experiments, a custom computer program automatically detected **seizure** discharges and triggered a TTL pulse to activate the **Peltier**. In these experiments the **Peltier** automatically terminated the slice bursting in less than four seconds. When the **Peltier** device was placed in contact with the normal, exposed cortex of a newborn pig, we found that the cortical temperature rapidly decreased from 36 degreesC to as low as 26 degreesC, at a depth of 1.7 mm below the **cooling** unit. Therefore, local **cooling** may rapidly terminate focal paroxysmal discharges and might be adapted for clinical practice.

Legal Status (Type, Date, Text)

Publication 20021114 A2 Without international search report and to be
republished upon receipt of that report.

10/5,K/2 (Item 2 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT

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X 00534068 **Image available**

REMOTELY REMOVABLE COVERING AND SUPPORT

ENVELOPPE POUVANT ETRE RETIREE A DISTANCE ET SUPPORT ASSOCIE

Patent Applicant/Assignee:

GORE ENTERPRISE HOLDINGS INC,

Inventor(s):

ARMSTRONG Joseph Robert,

VONESH Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9965420 A1 19991223

Application: WO 99US12980 19990607 (PCT/WO US9912980)

Priority Application: US 9898103 19980615

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

English Abstract

The invention creates a thin tubular multiple filament (film or fiber) structure that can hold high internal pressures. When desired, an extension of the filaments can be pulled in any direction to unfurl the structure. This device is useful for self expanding stent or stent graft delivery systems, balloon dilatation catheters, removable guide wire lumens for catheters, drug infusion or suction catheters, guide wire bundling casings, removable filters, removable wire insulation, removable packaging and other applications.

Detailed Description

... 15 layers of pipe thread tape (e.g., Poly-Temp Teflon® Tape, available from Anti- **Seize** Technology, Franklin Park, IL) and this assembly is placed in an air convection oven at 3700C for 5 minutes. After **cooling** this assembly, the warp knit/external pipe thread tape support is stripped from the mandrel...

10/5,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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X 00478564 **Image available**

AN INFLATABLE THERMAL BLANKET FOR CONVECTIVELY AND EVAPORATIVELY COOLING A BODY

COUVERTURE THERMIQUE GONFLABLE PERMETTANT DE REFROIDIR UN CORPS PAR CONVECTION ET EVAPORATION

Patent Applicant/Assignee:

AUGUSTINE MEDICAL INC,

AUGUSTINE Scott D,

IAIZZO Paul Anthony,

Inventor(s):

AUGUSTINE Scott D,

IAIZZO Paul Anthony,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9909916 A1 19990304

Application: WO 98US17822 19980825 (PCT/WO US9817822)

Priority Application: US 97918308 19970826

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US
UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN
GW ML MR NE SN TD TG

English Abstract

An inflatable thermal blanket is disclosed for convectively and evaporatively cooling a patient. The inflatable thermal blanket comprises an upper sheet and a base sheet that are attached at a plurality of locations to form an inflatable covering. The base sheet includes a plurality of apertures that direct an inflating medium from the inflatable covering toward the patient. The base sheet also supports a fluid delivery apparatus that distributes and delivers a cooling fluid to the patient. The fluid is evaporated from the patient's skin by the inflating medium exhausted from the inflatable covering. The fluid delivery apparatus may be constructed in a variety of configurations and may be circulate a variety of fluids, which may be pressurized or unpressurized. In operation, an air blower, that may also include a compressor for selectively delivering room temperature or cooled air to the inflatable thermal blanket, is connected to the inflatable covering. The blower delivers air, under pressure, to an inlet opening in the inflatable covering. The pressurized air is distributed throughout the inflatable covering and flows to the patient through the apertures in the base sheet. The inflatable thermal blanket is configured to cover one or more portions of a patient's body. In one construction, the inflatable thermal blanket covers all of the patient's body except for the head. In an alternative construction, a specially designed inflatable thermal blanket is constructed to cover only the patient's head.

Detailed Description

... at the low end. In the mid-spectrum, motor skill impairment, loss of consciousness and **seizures** occur. At the high end, the individual suffers irreversible cellular injury, especially of the highly...
...death. Hyperthennia is a thus a condition that, depending on its severity, may require immediate **cooling** treatment to return the patient's core temperature to normal.

Cooling treatment may also have...

10/5,K/4 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2002 WIPO/Univentio. All rts. reserv.

*
00386080 **Image available**
SYSTEMS FOR PREDICTION, RAPID DETECTION, WARNING, PREVENTION OR CONTROL OF
CHANGES IN ACTIVITY STATES IN THE BRAIN
SYSTEME DE PREVISION, DE DETECTION RAPIDE, D'AVERTISSEMENT, DE PREVENTION
OU DE CONTROLE DES MODIFICATIONS DE L'ETAT DE L'ACTIVITE CEREbraLE

Patent Applicant/Assignee:

UNIVERSITY OF KANSAS,

Inventor(s):

DORFMEISTER Josef,

FREI Mark,

LERNER David,

OSORIO Ivan,
RALSTON John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9726823 A1 19970731

Application: WO 97US1037 19970121 (PCT/WO US9701037)

Priority Application: US 9610477 19960123; US 97778771 19970106

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD
SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU
MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

English Abstract

A system (10) analyzes signals representative of a subject's brain activity in a signal processor (12) for information indicating the subject's current activity state and for predicting a change in the activity state. One preferred embodiment uses a combination of nonlinear filtering methods to perform real-time analysis of the electro-encephalogram (EEG) or electro-corticogram (ECoG) signals from a subject patient for information indicative of or predictive of a seizure, and to complete the needed analysis at least before clinical seizure onset. The preferred system then performs an output task for prevention or abatement of the seizure, or for recording pertinent data.

Claim

... step of producing an output in response to the indication of the occurrence of a **seizure** as said abnormal activity with said output taken from the group consisting of administering a...
...physiological receptors of the patient, heating at least a portion of the subject's brain, **cooling** at least a portion of the subject's brain, facilitating activity in 3 5 a...

16/5,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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X 01311940

**FUSED HETEROTRICYCLIC COMPOUNDS, PROCESS FOR PREPARING THE COMPOUNDS AND
DRUGS CONTAINING THE SAME**

ABSTRACT EP 1238979 A1

The present invention provides a novel compound having an excellent corticotrophin-releasing-factor receptor antagonistic activity. That is, it provides a compound represented by the following formula, a pharmacologically acceptable salt thereof or hydrates thereof. Wherein A, B and D are the same as or different from each other and each represents a group represented by the formula - (CR1)R2)m)- (wherein R1) and R2) are the same as or different from each other and each represents a C1-6)) alkyl group etc.), -NR3)- (wherein R3) represents hydrogen etc.) etc.; E and G are the same as or different from each other and each represents a group represented by the formula - (CR6)R7)p)- (wherein R6) and R7) are the same as or different from each other and each represents hydrogen etc.; and p represents an integer of 0, 1 or 2); J represents a carbon atom or nitrogen atom, each substituted with C1-6)) alkyl group optionally substituted with a halogen atom, etc.; K and L are the same as or different from each other and each represents carbon atom or nitrogen atom; M means hydrogen, a halogen atom, an optionally substituted C1-6)) alkyl group etc.; and the partial structure ----- means a single or double bond.

16/5,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
X (c) 2002 European Patent Office. All rts. reserv.

01137163

REMEDIES OR PREVENTIVES FOR INTRACTABLE EPILEPSY

ABSTRACT EP 1103261 A1

A therapeutic or preventive agent for intractable epilepsy comprising as an active ingredient a compound represented by R2)-CH2))CONH-R1) (I), wherein R1) is a phenyl group or a pyridyl group, which may have a substituent and R2) is a 2-oxo-1-pyrrolidinyl group which may have a substituent.

16/5,K/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
X (c) 2002 WIPO/Univentio. All rts. reserv.

00944947 **Image available**

N-(2-ARYLETHYL)BENZYLAMINES AS ANTAGONISTS OF THE 5-HT"sub"6 RECEPTOR

English Abstract

The present invention provides compounds of formula (I), which are antagonists of the 5-HT"sub"6 receptor.

16/5,K/4 (Item 4 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT
(c) 2002 WIPO/Univentio. All rts. reserv.

X
00883749

23 HUMAN SECRETED PROTEINS

English Abstract

The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

16/5,K/5 (Item 5 from file: 349)

X
DIALOG(R)File 349:PCT FULLTEXT
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00822884

NUCLEIC ACIDS, PROTEINS, AND ANTIBODIES

English Abstract

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

*
16/5,K/6 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT
(c) 2002 WIPO/Univentio. All rts. reserv.

00796717 **Image available**

TECHNIQUES USING HEAT FLOW MANAGEMENT, STIMULATION, AND SIGNAL ANALYSIS TO TREAT MEDICAL DISORDERS

Patent Applicant/Assignee:

JOHNS HOPKINS UNIVERSITY, Suite 906, 111 Market Place, Baltimore, MD
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Inventor(s):

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Legal Representative:

MORDUCH Ruth N (et al) (agent), Pillsbury Madison & Sutro LLP, 1100 New
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200128622 A2-A3 20010426 (WO 0128622)

Application: WO 2000US28814 20001019 (PCT/WO US0028814)

Priority Application: US 99160328 19991019; US 2000201188 20000502

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61N-001/18

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 16128

English Abstract

A device and method of use for treating a medical disorder by surgically implanting into a patient at least one sensor element (4) capable of detecting and conveying cell signals; attaching a management unit (8) such that a micro controller (22) of the management unit (8) is connected to at least one sensor element (4); and connecting the management unit (8) via a lead bundle (7) to at least one treatment device (71). The treatment device may be an electrical stimulation device (27), a magnetic stimulation device, a heat transfer device (9), or a medication delivery device (71). Responsive to signals from the one or more sensor elements, mathematical algorithms of the management unit use wavelet crosscorrelation analysis to prompt delivery of at least one treatment modality, such as heat transfer, current pulses, magnetic stimulation or medication. The medical disorder may arise from the brain, central nervous system or organs and tissues outside of the central nervous system.

Legal Status (Type, Date, Text)

Publication 20010426 A2 Without international search report and to be republished upon receipt of that report.

Examination 20010802 Request for preliminary examination prior to end of 19th month from priority date

Search Rpt 20011101 Late publication of international search report

Republication 20011101 A3 With international search report.

Fulltext Availability:

Detailed Description

Detailed Description

... 1989). Hypothermia also appears to reduce occurrence, frequency, and amplitude of cortical potentials and suppresses **seizure** activity

(Battista, 1967;Essman and Sudak, 1964;Moseley et al., 1972a;Moseley et al., 1972b;Ommaya and Baldwin, 1963;Vastola et al., 1969). Cooling is thought to prevent or abort **seizures** by reducing cortical excitability. **Cooling brain** tissue can be safely accomplished when properly undertaken. For example, irrigation of temporal horn of...the invention relates to a method of reducing or preventing occurrence of a seizure comprising **cooling brain** tissue at or near a **seizure** focus or a brain structure that modulates (e.g. causes or influences the occurrence of) **seizures** .

In another preferred embodiment, the invention relates to a method of reducing or preventing occurrence...

...the invention relates to a method of reducing or preventing occurrence of a seizure comprising **cooling brain** tissue and electrically stimulating **brain** at or near a **seizure** focus or a brain structure that modulates **seizures** . In yet another preferred embodiment, the invention relates to a method of reducing or preventing occurrence of a seizure comprising **cooling brain** tissue and infusing said medication into brain at or near a **seizure** focus or a brain structure that modulates **seizures** .

In still another preferred embodiment, the invention relates a method of reducing or preventing occurrence of a seizure comprising **cooling brain** tissue and electrically stimulating **brain** tissue and infusing a medication into brain at or near a **seizure** focus or a brain structure that modulates **seizures** . This structure might be near, part of, or remote from region or regions where **seizure** is originating.

Yet another preferred embodiment provides for treatment of brain disorders such as intractable...tissue swelling and/or inflammation by controlling temperature would be executed essentially as described for **brain cooling** to regulate **seizures** . Briefly, the method would comprise surgically cutting a heat transfer aperture into a patient's... and a cooling unit adhered to rat's head. Due to thinness of rat crania, **cooling** of **brain** was achieved through intact rat skull. EEG tracings were made at baseline (28.8'C) and at hypothermic (25.2'C) temperatures.

An overall reduction in **seizure** activity was observed after cooling, marked by return of normal exploratory behavior and normal EEG...J of Neurophysiology 41, 1282

84. OMMAYA.A.K. AND BALDWIN.M. (1963). Extravascular Local **Cooling** of the **Brain** in Man. J Neurosurgery 20, 8

85. OSORIO.I., FREI,M.G., AND WILKINSON.S.B. (1998). Real-time automated detection and quantitative analysis of **seizures** and short-term prediction of clinical onset. **Epilepsia** 39, 615

86. PASCUAL-LEONE.A., TORMOSJ.M., KEENANJ., TARAZONA.F., CANETE,C., AND CATALA...

...transcranial magnetic stimulation. J Clin Neurophysiol 153 333

87. PENFIELD.W. AND JASPER.H. (1954). **Epilepsy** and the functional anatomy of the human brain. (Boston: Little Brown and Co.).

X 00742930
47 HUMAN SECRETED PROTEINS

English Abstract

The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

16/5,K/8 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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X 00741470
SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME

English Abstract

The present invention is directed to novel polypeptides and to nucleic acid molecules encoding those polypeptides. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide molecules comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention.

Set	Items	Description
S1	17019	SEIZ? OR EPILEP? OR ANTIEPILEP?
S2	281175	COOL? OR PELTIER?
S3	746797	MAP? ? OR MAPPING? ? OR MAPPED OR LOCAT? OR IDENTIF? OR FI- ND? ?
S4	750673	S3 OR IDENTIFY
S5	375	S1(5N)S4
S6	309	S1(S)S2
S7	4	S6 AND IC=(A61F OR A61B)
S8	38	S5 AND IC=(A61F OR A61B)
S9	4	S7
S10	4	IDPAT (sorted in duplicate/non-duplicate order)
S11	2	S10 NOT S8
S12	176	(BRAIN OR NEOCORT? OR CORTEX) (5N)S2
S13	10	S12(S)S1
S14	8	S13 NOT S10
S15	8	IDPAT (sorted in duplicate/non-duplicate order)
S16	8	IDPAT (primary/non-duplicate records only)

? show files

File 348:EUROPEAN PATENTS 1978-2002/Dec W02

(c) 2002 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20021219,UT=20021212

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9/5/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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014562903 **Image available**
WPI Acc No: 2002-383606/200241
XRPX Acc No: N02-300293

X Neurological dysfunction detecting system, stimulates region of brain,
senses response to stimulation, calculates electrophysiological parameter
based on response and initiates action on basis of calculated parameter

Patent Assignee: NEUROPACE INC (NEUR-N)

Inventor: PLESS B D

Number of Countries: 005 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200236003	A1	20020510	WO 2001US45784	A	20011102	200241 B

Priority Applications (No Type Date): US 2000706322 A 20001103

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200236003	A1	E 65	A61B-005/0484	

Designated States (National): CA JP

Designated States (Regional): DE FR GB

Abstract (Basic): WO 200236003 A1

NOVELTY - The system measures at least one electrophysiological parameter of a region of a patient's brain and performs an action in response.

DETAILED DESCRIPTION - The system includes stimulation and sensing subsystems that include depth electrodes (412, 416, 418) implanted at desired locations in the patient's brain to electrically stimulate the brain and sense responses to the stimulation, respectively. A processor calculates the electrophysiological parameter based on the response and initiates an action in response to the calculated parameter.

USE - For measuring electrophysiological parameters of a region of a patient's brain and performing an action in response to the measurement in order to determine and predict a patient's susceptibility to neurological dysfunction.

ADVANTAGE - In contrast to continuous brain-stimulation systems and to seizure-detection systems using only passive electroencephalogram information, the present system performs an active analysis of neural electrophysiological parameters to **identify** susceptibility to imminent **seizure** activity, and is capable of working in conjunction with and enhancing electroencephalogram-based detection and prediction schemes.

DESCRIPTION OF DRAWING(S) - The drawing is a schematic sectional view of a patient's brain illustrating the placement of electrodes.

Hippocampus (312)

Parahippocampal gyrus (314)

Stimulating depth lead (410)

Stimulating electrode (412)

Sensing depth lead (414)

Sensing electrodes (416, 418)

pp; 65 DwgNo 4/17

Title Terms: NEUROLOGICAL; DYSFUNCTION; DETECT; SYSTEM; STIMULATING; REGION
; BRAIN; SENSE; RESPOND; STIMULATING; CALCULATE; PARAMETER; BASED;
RESPOND; INITIATE; ACTION; BASIS; CALCULATE; PARAMETER

Derwent Class: P31; P34; S05
International Patent Class (Main): A61B-005/0484
International Patent Class (Additional): A61N-001/36
File Segment: EPI; EngPI

9/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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014560424 **Image available**

WPI Acc No: 2002-381127/200241

Related WPI Acc No: 1999-444508; 1999-560910; 1999-571979; 2000-097867;
2000-106224; 2000-374497; 2001-069880; 2001-168765; 2001-327451;
2001-366335; 2001-367086; 2001-396796; 2001-424434; 2001-424986;
2001-475461; 2001-513992; 2001-513993; 2001-528497; 2001-541213;
2001-607348; 2001-638598; 2002-010846; 2002-017541; 2002-026554;
2002-089577; 2002-130712; 2002-204303; 2002-392970; 2002-433895;
2002-433896; 2002-619098; 2002-681741; 2002-698707

XRPX Acc No: N02-298159

**Cooling method of spinal cord for treating chronic pain, involves cooling
evaporator arranged in partial contact with spinal cord, by passing
condensed fluid through a pipe**

Patent Assignee: INNERCOOL THERAPIES INC (INNE-N)

Inventor: DOBAK J D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6364899	B1	20020402	US 9812287	A	19980123	200241 B
			US 9847012	A	19980324	
			US 9852545	A	19980331	
			US 98103342	A	19980623	
			US 98215038	A	19981216	
			US 98215040	A	19981216	
			US 99262805	A	19990304	
			US 99328854	A	19990609	

Priority Applications (No Type Date): US 99328854 A 19990609; US 9812287 A
19980123; US 9847012 A 19980324; US 9852545 A 19980331; US 98103342 A
19980623; US 98215038 A 19981216; US 98215040 A 19981216; US 99262805 A
19990304

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6364899	B1	14	A61F-007/12		CIP of application US 9812287
					CIP of application US 9847012
					CIP of application US 9852545
					CIP of application US 98103342
					CIP of application US 98215038
					CIP of application US 98215040
					CIP of application US 99262805
					CIP of patent US 5957963
					CIP of patent US 6051019
					CIP of patent US 6096068

Abstract (Basic): US 6364899 B1

NOVELTY - Condensed fluid from a condenser (102) is passed to an
evaporator (106) through a pipe (104), so as to cool the evaporator

which is arranged in partial contact with the spinal cord (12).

USE - For **cooling** the spinal cord of a patient, for treatment of chronic pain, muscle spasticity, **epilepsy** and also for treatment of various sclerosis.

ADVANTAGE - Chronic pain is controlled effectively without damaging the nerve tissues.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic view of the arrangement of the evaporator on spinal cord of a patient.

Spinal cord (12)

Condenser (102)

Pipe (104)

Evaporator (106)

pp; 14 DwgNo 7/9

Title Terms: COOLING; METHOD; SPINE; CORD; TREAT; CHRONIC; PAIN; COOLING; EVAPORATION; ARRANGE; CONTACT; SPINE; CORD; PASS; CONDENSATION; FLUID; THROUGH; PIPE

Derwent Class: P32

International Patent Class (Main): **A61F-007/12**

File Segment: EngPI

9/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014449520

WPI Acc No: 2002-270223/200232

XRPX Acc No: N02-210274

Method for forming brain scalp electric potential information chart

Patent Assignee: UNIV TIANJIN (UYTI-N)

Inventor: CHENG X; QI H; WAN B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1333003	A	20020130	CN 2001120274	A	20010713	200232 B

Priority Applications (No Type Date): CN 2001120274 A 20010713

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1333003	A		A61B-005/0476	

Abstract (Basic): CN 1333003 A

NOVELTY - The method for producing cerebral scalp potential graph relates to a formation method of potential information graph, and includes the following steps: according to the electroencephalic original data collected from different lead electrodes on the head portion and non-linear linetic theory utilizing phase space reconstitution technique to form scalp potential information transmission matrix between leads, then plotting the scalp topological distribution graph-electroencephalic information map (BIM) according to the information transmission quantity of every lead and time sequence complexity data and using a full-new angle to continuously reflect time space characteristics of electroencephalic activation to observe the change process of human brain function state. Said invention can be used for making scalp electroencephalic dianosis in the reseach of **epileptic focus location** and induced response, also can be used for EEG signal analysis of brain being in different physiological

conditions or senile dementia patient.

DwgNo 0/0

Title Terms: METHOD; FORMING; BRAIN; SCALP; ELECTRIC; POTENTIAL;
INFORMATION; CHART

Derwent Class: P31; S05

International Patent Class (Main): A61B-005/0476

File Segment: EPI; EngPI

9/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014387185 **Image available**

WPI Acc No: 2002-207888/200227

Related WPI Acc No: 2002-673661

XRPX Acc No: N02-158527

Connector for in-body multi-contact medical electrode, has elongated structure pivotable with respect to another structure, to engage multi-contact tail inserted into void with ball plungers in closed condition

Patent Assignee: AD-TECH MEDICAL INSTR CORP (ADTE-N)

Inventor: PUTZ D A

Number of Countries: 027 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1147783	A2	20011024	EP 2001108893	A	20010410	200227 B
US 6415168	B1	20020702	US 2000552260	A	20000419	200248

Priority Applications (No Type Date): US 2000552260 A 20000419

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 1147783	A2	E	13	A61N-001/05	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

US 6415168	B1			A61B-005/04	
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Abstract (Basic): EP 1147783 A2

NOVELTY - An elongated structure (18) extending along elongated structure (16) with ball plungers (22), has a void (24) for insertion of multi-contact tail and access openings (28) in top face (26) to expose contacts of tail. Elongated structure (18) is pivotable between open and closed positions with respect to the structure (16), to engage the exposed contacts (14) of the tail with ball plungers in closed position.

USE - Connector for in-body multi-contact medical electrodes used in surgeries, medical treatments such as **epilepsy** treatment for brain mapping .

ADVANTAGE - Compact connector is obtained and space in which opening and closing of elongated structure occurs is minimized. Easy handling and excellent connections are enabled. As the contacts of multi-contact tail are engaged with ball plungers, quick withdrawal of the tail without any destruction is enabled.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of connector with elongated structure in opened condition.

Exposed contacts of tail (14)

Elongated structures (16,18)

Ball plungers (22)
Void (24)
Top face (26)
Access openings (28)
pp; 13 DwgNo 1/7
Title Terms: CONNECT; BODY; MULTI; CONTACT; MEDICAL; ELECTRODE; ELONGATE;
STRUCTURE; PIVOT; RESPECT; STRUCTURE; ENGAGE; MULTI; CONTACT; TAIL;
INSERT; VOID; BALL; PLUNGE; CLOSE; CONDITION
Derwent Class: P31; P34; S05; V04
International Patent Class (Main): A61B-005/04 ; A61N-001/05
File Segment: EPI; EngPI

9/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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013204173 **Image available**
WPI Acc No: 2000-376046/200032
XRPX Acc No: N00-282452

**System for long-term recording of neural activity by implanting
apparatus, in particular for monitoring persons susceptible to epilepsy,
while allowing patient to retain mobility**

Patent Assignee: MEDHKOUR A M (MEDH-I)
Inventor: MEDHKOUR A M
Number of Countries: 019 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200025668	A1	20000511	WO 99US26115	A	19991104	200032 B

Priority Applications (No Type Date): US 99107240 A 19991104; US 98107240 P
19981105

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200025668	A1	E	35	A61B-005/00	

Designated States (National): JP
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU
MC NL PT SE

Abstract (Basic): WO 200025668 A1

NOVELTY - The system enables long-term sensing (14), analysis, recording (46), and storage (50) of data concerning electrical brain-wave activity in a patient. At least one device for sensing neural wave activity is implanted within the patient's skull, and apparatus for recording sensed signals is implanted in e.g., the chest or behind a patient's ear.

DETAILED DESCRIPTION - The recording apparatus includes memory for storing a reference table of patterns indicative of brain-waves of interest. Implanted sensor signals are compared with the reference patterns, which each carry an associated code. Codes are recorded together with time/date/sensor data for sensor-derived signals, and data may then be down-loaded for analysis at a convenient time.

USE - For long-term sensing, analysis, recording and storage of data derived from brain-wave activity, to aid diagnosis, treatment, mapping /localization of epilepsy and other neural disorders.

ADVANTAGE - Provides long-term, economic collection of electrical brain-wave activity data, despite random occurrence of e.g., epileptic

seizure events, without confining patient to clinical environment, or inducing such events by stressing or traumatizing the patient e.g., by withholding medication or sleep.

DESCRIPTION OF DRAWING(S) - The drawing illustrates diagrammatically an implantable monitoring/recording unit in accordance with the inventive system.

Implantable sensor electrode array (14)
Implantable monitor recorder unit (30)
Implanted electrodes (36)
Amplifiers (34)
Voltage regulator switch (72)
Battery power supply (68)
Microcontroller (46)
General system power supply for amplifiers (76)
Telemetry drivers (52, 54)
A-D converter (42)
RAM data storage (50)
Antenna for operationally down-loading recorded data on command (60)

pp; 35 DwgNo 2/9
Title Terms: SYSTEM; LONG; TERM; RECORD; NEURAL; ACTIVE; IMPLANT; APPARATUS
; MONITOR; PERSON; SUSCEPTIBILITY; EPILEPSY; ALLOW; PATIENT; RETAIN;
MOBILE
Derwent Class: P31; S05; W05
International Patent Class (Main): A61B-005/00
File Segment: EPI; EngPI

9/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012988851 **Image available**
WPI Acc No: 2000-160704/200014
XRAM Acc No: C00-050173
XRPX Acc No: N00-119913

Electrode array for monitoring cortical electrical activity to locate or define cortical epileptogenic foci comprises electrode cables and a bioresorbable material

Patent Assignee: CHILDRENS MEDICAL CENT (CHIL-N)

Inventor: MADSEN J R

Number of Countries: 086 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200001300	A1	20000113	WO 99US15244	A	19990707	200014 B
AU 9948622	A	20000124	AU 9948622	A	19990707	200027
US 6091979	A	20000718	US 98111328	A	19980707	200037

Priority Applications (No Type Date): US 98111328 A 19980707

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200001300 A1 E 23 A61B-005/0478

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK
SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
AU 9948622 A A61B-005/0478 Based on patent WO 200001300
US 6091979 A A61B-005/042

Abstract (Basic): WO 200001300 A1

NOVELTY - An electrode array (10) for monitoring electrical activity comprises electrode cables (12) for detection of electrical activity in a patient's body following implantation, and a bioresorbable material (14) connected to electrode cables for maintaining the cables in a predetermined spatial relationship.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method for inserting and removing a subdural electrode array comprising (i) arranging the electrode cables in a predetermined spatial relationship; (ii) providing a bioresorbable material for structurally interconnecting the electrode cables for maintaining their spatial relationship; (iii) monitoring electrical activity within the patient for determining epileptogenic foci, after a period of time in which the bioresorbable material is reabsorbed, and (iv) removing the electrode cables.

USE - The electrode array is used for monitoring cortical electrical activity to **locate** or define cortical **epileptogenic** foci. It can also be applied to monitor the electrical activity of other body structures such as, heart.

ADVANTAGE - The electrode cables can be removed without a second major reopening of the cranium. The electrode array which is capable of recording electrical signals over a sizable location of the brain can be removed safely, easily, and percutaneously.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic view of subdural electrode array disposed within subdural region of a brain.

Electrode array (10)
Electrode cables (12)
Bioresorbable material (14)
Lead wire (18)
Brain wave analyzer (28)
pp; 23 DwgNo 1/5

Title Terms: ELECTRODE; ARRAY; MONITOR; CORTICAL; ELECTRIC; ACTIVE; LOCATE;
DEFINE; CORTICAL; FOCUS; COMPRISE; ELECTRODE; CABLE; MATERIAL
Derwent Class: A96; D22; P31
International Patent Class (Main): A61B-005/042 ; A61B-005/0478
File Segment: CPI; EngPI

9/5/7 (Item 7 from file: 350)
DIALOG(R) File 350:Derwent.WPIX
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012774390 **Image available**
WPI Acc No: 1999-580617/199949
XRPX Acc No: N99-428651

Implantable medical electrode contact structure
Patent Assignee: JOHNSON & JOHNSON PROFESSIONAL (JOHJ); CODMAN &
SHURTLEFF INC (CODM-N)
Inventor: BEARDSLEY T A; YOUNG T R
Number of Countries: 082 Number of Patents: 005
Patent Family:

Patent No.	Kind	Date	Applicat No	Kind	Date	Week
WO 9949933	A1	19991007	WO 99US5877	A	19990317	199949 B

AU 9930974	A	19991018	AU 9930974	A	19990317	200010
US 6052608	A	20000418	US 9850460	A	19980330	200026
EP 1066082	A1	20010110	EP 99912641	A	19990317	200103
			WO 99US5877	A	19990317	
JP 2002509776	W	20020402	WO 99US5877	A	19990317	200225
			JP 2000540893	A	19990317	

Priority Applications (No Type Date): US 9850460 A 19980330

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9949933	A1	E	23	A61N-001/05	
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Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9930974	A				Based on patent WO 9949933
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US 6052608	A			A61B-005/04	
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EP 1066082	A1	E		A61N-001/05	Based on patent WO 9949933
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Designated States (Regional): DE FR GB

JP 2002509776	W		24	A61N-001/05	Based on patent WO 9949933
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Abstract (Basic): WO 9949933 A1

NOVELTY - The electrode (10) has insulating layers (14,18) with an aperture (20) formed on the layer (18). A conductive contact (24) with a rounded protrusion (26) and an edge portion (28) bordering it is formed on the electrode. The conductive contact is positioned between the layers to align the protrusion with the aperture.

DETAILED DESCRIPTION - The conductive contact comprises various bio-compatible materials including platinum, stainless steel, gold and conductive elastomer. An INDEPENDENT CLAIM is also included for manufacturing method of a medical electrode.

USE - For implantable medical electrode for sensing cortical electrical activity for **identifying** foci of **epileptogenic** brain for removal.

ADVANTAGE - The conductive contacts ensure more reliable contact with brain. Since rounded protrusion of contact causes friction between contact and brain, precise positioning and maintenance of positioning are facilitated. Since thinner electrode structure is offered narrowing of intracranial pressure in pediatric cases which has relatively narrow space between dura and brain are avoided.

DESCRIPTION OF DRAWING(S) - The figure shows the cross- sectional view of medical electrode with a conductive contact.

Electrode (10)
 Insulating layers (14,18)
 Aperture (20)
 Conductive contact (24)
 Protrusion (26)
 Edge portion (28)

pp; 23 DwgNo 1/6

Title Terms: IMPLANT; MEDICAL; ELECTRODE; CONTACT; STRUCTURE

Derwent Class: P31; P34; S05

International Patent Class (Main): A61B-005/04 ; A61N-001/05

File Segment: .EPI; EngPI

9/5/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012747620 **Image available**
WPI Acc No: 1999-553737/199947
XRPX Acc No: N99-409995

Brain monitor for detecting onset of seizure

Patent Assignee: RAJAGOPAL C K (RAJA-I)
Inventor: RAJAGOPAL C K
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2336211	A	19991013	GB 9620057	A	19960926	199947 B
GB 2336211	B	20010502	GB 9620057	A	19960926	200126

Priority Applications (No Type Date): GB 9620057 A 19960926

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2336211	A	4	A61B-005/048	
GB 2336211	B		A61B-005/048	

Abstract (Basic): GB 2336211 A

NOVELTY - Three electrodes are placed on the scalp of the patient recording the patient's electroencephalogram (EEG). A processing unit analyses the EEG and generates an alarm if certain preset parameters indicative of onset of a **seizure** are **identified** in the EEG.

USE - For monitoring a patient's brain activity and generating alarm upon onset of epileptic seizure or drowsiness. May be used to monitor effect of drugs

ADVANTAGE - Alerts e.g. hospital staff when patient is about to have a seizure.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow chart of the processing of the brain signals.

pp; 4 DwgNo 1/4

Title Terms: BRAIN; MONITOR; DETECT; ONSET; SEIZURE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-005/048**

File Segment: EPI; EngPI

9/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012655058
WPI Acc No: 1999-461163/199939
XRPX Acc No: N99-345183

Portable miniaturized electro-encephalo feedback device for epileptic attach warning

Patent Assignee: JONES T T (JONE-I)
Inventor: JONES T T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2335046	A	19990908	GB 994948	A	19990305	199939 B

Priority Applications (No Type Date): GB 984647 A 19980306

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
GB 2335046 A 9 A61B-005/0476

Abstract (Basic): GB 2335046 A

NOVELTY - The device has scalp/skin electrodes located near the focus of seizure abnormal brainwave activity. The main unit is in a small container, easily concealed and battery operated with an interface to remote pre-amplifier. It provides vibratory/audible/visual feedback signal and has an electronic memory system for transfer of data to host computer.

DETAILED DESCRIPTION - The device provides an appropriate signal in the case of potential seizure brainwave activity, actual seizure brainwave activity, termination of the seizure activity and onset of status epilepticus. It has a head protection band/cap, inflated by seizure activity to prevent head and face injuries.

USE - For use by person susceptible to epileptic seizure, provides instant feedback system to warn of potential seizure.

ADVANTAGE - Compact, provides instant feedback.

pp; 9 DwgNo 0/0

Title Terms: PORTABLE; ELECTRO; FEEDBACK; DEVICE; EPILEPSY; ATTACH; WARNING

Derwent Class: P31; S05; T01

International Patent Class (Main): A61B-005/0476

International Patent Class (Additional): A61B-005/0482 ; G06F-017/00

File Segment: EPI; EngPI

9/5/10 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011854007 **Image available**

WPI Acc No: 1998-270917/199824

XRPX Acc No: N98-212810

Epileptiform activity evoking apparatus for treating temporal lobe epilepsy - has multiple sensors to monitor epileptiform activity of patient's head and assist in location selection of coils

Patent Assignee: UNIV CALIFORNIA (REGC)

Inventor: DOBSON J P; FULLER M D; WIESER H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5743854	A	19980428	US 94219183	A	19940329	199824 B

Priority Applications (No Type Date): US 94219183 A 19940329

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
US 5743854 A 6 A61B-005/0484

Abstract (Basic): US 5743854 A

The apparatus (10) includes a DC magnetic field generator surrounding at least part of the patient's head. It generates a DC magnetic field of a strength sufficient to evoke epileptiform activity in the head of the patient. A DC power source is coupled to the DC magnetic field generator. A support structure maintains the DC magnetic field generator in a selected location relative to the patient's head.

Sensors are coupled to the patient's head to monitor the epileptiform activity in it and to assist in the location selection of the DC magnetic field generator to evoke the epileptiform activity in the patient's head.

The magnetic field strength varies between about 1 milliTesla and 2 milliTesla. The DC magnetic field generator includes two or more coils, each of which is wound around a corresponding thermoplastic member. The support structure maintains the DC magnetic field generator at a location to locate the production of the magnetic field within the hippocampus region of the brain.

USE - For patients with drug resistant temporal lobe epilepsy.

ADVANTAGE - Enables rapid **identification** of **epileptiform** areas of brain by means of EEG. Avoids invasive electrode implantation. Enables research relating to influence of magnetic field on central nervous system function.

Dwg.1/3

Title Terms: ACTIVE; EVOKE; APPARATUS; TREAT; TEMPORAL; LOBE; EPILEPSY; MULTIPLE; SENSE; MONITOR; ACTIVE; PATIENT; HEAD; ASSIST; LOCATE; SELECT; COIL

Derwent Class: P31; S05

International Patent Class (Main): A61B-005/0484

International Patent Class (Additional): A61B-005/05

File Segment: EPI; EngPI

9/5/11 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009727274

WPI Acc No: 1994-007124/199401

Related WPI Acc No: 1992-141666; 1996-009504; 1996-259512; 1998-062055; 2001-289391; 2001-366518; 2002-146549

XRPX Acc No: N94-005882

Real-time detection and imaging of solid brain tumour tissue - comparing video images of area illuminated with EMR taken before and after intravenous injection of EMR absorbing dye

Patent Assignee: UNIV WASHINGTON (UNIW); HAGLUND M M (HAGL-I); HOCHMAN D (HOCH-I)

Inventor: HAGLUND M M; HOCHMAN D; HOCHMAN D E

Number of Countries: 026 Number of Patents: 011

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9325141	A1	19931223	WO 93US5573	A	19930607	199401 B
AU 9345324	A	19940104	AU 9345324	A	19930607	199417
EP 644737	A1	19950329	EP 93915290	A	19930607	199517
			WO 93US5573	A	19930607	
US 5438989	A	19950808	US 90565454	A	19900810	199537
			US 92894270	A	19920608	
JP 7507472	W	19950824	WO 93US5573	A	19930607	199542
			JP 94501728	A	19930607	
AU 666569	B	19960215	AU 9345324	A	19930607	199614
EP 644737	A4	19950823	EP 93915290	A		199618
AU 9652278	A	19960711	AU 9345324	A	19930607	199635
			AU 9652278	A	19960515	
AU 695898	B	19980827	AU 9345324	A	19930607	199846
			AU 9652278	A	19960515	

EP 644737	B1	20020828	EP 93915290	A	19930607	200264
			WO 93US5573	A	19930607	
DE 69332244	E	20021002	DE 632244	A	19930607	200273
			EP 93915290	A	19930607	
			WO 93US5573	A	19930607	

Priority Applications (No Type Date): US 92894270 A 19920608; US 90565454 A 19900810

Cited Patents: US 4515165; US 4556057; US 4767717; US 4768513; US 4999614; US 5014709; US 5027817; US 5198977; US 5213105; 2.Jnl.Ref; CA 2048697; US 4543604; US 4811414; US 5065444; US 5215095; WO 8300970

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9325141	A1	E	85	A61B-005/00	
				Designated States (National):	AU BR CA CZ HU JP KR RU
				Designated States (Regional):	AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
AU 9345324	A			A61B-005/00	Based on patent WO 9325141
EP 644737	A1	E		A61B-005/00	Based on patent WO 9325141
				Designated States (Regional):	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
US 5438989	A		22	A61B-005/00	CIP of application US 90565454 CIP of patent US 5215095
JP 7507472	W		24	A61B-010/00	Based on patent WO 9325141
AU 666569	B			A61B-005/00	Previous Publ. patent AU 9345324 Based on patent WO 9325141
EP 644737	A4			A61B-005/00	
AU 9652278	A			A61B-006/00	Div ex application AU 9345324
AU 695898	B			A61B-006/00	Div ex application AU 9345324 Previous Publ. patent AU 9652278
EP 644737	B1	E		A61B-005/00	Based on patent WO 9325141
				Designated States (Regional):	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69332244	E			A61B-005/00	Based on patent EP 644737 Based on patent WO 9325141

Abstract (Basic): WO 9325141 A

The area of interest, which contains solid tumour tissue, is illuminated with electromagnetic radiation which contains a wavelength which will be absorbed by a dye to be used. A video signal of the area of interest is recorded to be used as a control.

Dye is injected by bolus injection into a vein local to the area of interest. Further video images of the area are obtained over a period of time for comparison with the control image. The frames are compared looking for changes in the absorption level of the dye into the tissue with faster absorption indicating increased vascularity of solid tumour tissue and the inability to clear the as fast as normal tissue.

USE/ADVANTAGE - Inexpensive real-time means of detecting and mapping tumour tissue so as to detect areas of abnormal cortical activity such as **epileptic** foci. For **identifying** individual nerves during neurosurgical procedures for tumour removal or anastomoses of severed nerves.

Dwg.0/19

Title Terms: REAL-TIME; DETECT; IMAGE; SOLID; BRAIN; TUMOUR; TISSUE; COMPARE; VIDEO; IMAGE; AREA; ILLUMINATE; AFTER; INTRAVENOUS; INJECTION; ABSORB; DYE

Index Terms/Additional Words: neural; cranial

Derwent Class: B04; B05; P31; S05
International Patent Class (Main): A61B-005/00 ; A61B-006/00 ;
A61B-010/00
International Patent Class (Additional): A61B-005/0265 ; A61B-006/12 ;
G01N-021/00
File Segment: CPI; EPI; EngPI

9/5/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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009691654 **Image available**
WPI Acc No: 1993-385208/199348
XRPX Acc No: N93-297536

Determination of location of intracerebral sources of electrical activity
- estimating distribution of normal power as function of location within
brain using bank of spatial filters

Patent Assignee: NICOLET BIOMEDICAL INC (NICO-N); NICOLET INSTR CORP
(NICO-N)

Inventor: HECOX K E; JOSEPH J M; VAN VEEN B D; JOSEPH J

Number of Countries: 007 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5263488	A	19931123	US 92957190	A	19921005	199348 B
EP 598478	A1	19940525	EP 93307670	A	19930928	199421
EP 598478	B1	19990602	EP 93307670	A	19930928	199926
DE 69325142	E	19990708	DE 625142	A	19930928	199933
			EP 93307670	A	19930928	

Priority Applications (No Type Date): US 92957190 A 19921005

Cited Patents: EP 315545; EP 527482; FR 2604889; US 4532591

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5263488	A		15	A61B-005/0476	
EP 598478	A1 E	19		G06F-015/20	
				Designated States (Regional): BE DE FR GB IT NL	
EP 598478	B1 E			G06F-017/00	
				Designated States (Regional): BE DE FR GB IT NL	
DE 69325142	E			G06F-017/00	Based on patent EP 598478

Abstract (Basic): US 5263488 A

The method of determining the location of sources of electrical activity within the head of an individual, involves placing a number of electrodes at known positions on the head of an individual. Electrical signals are obtained from the electrodes indicative of the electrical potentials at the electrodes. A matrix of source location to electrode potential transfer functions for the electrodes is determined, for electrical events at locations within the head of the individual known with respect to the electrodes.

A covariance matrix estimate on the data from the electrodes is determined at a number of points in time. The inverse of the covariance matrix estimate for the data from the electrodes is determined at a number of points in time. The estimated signal power at the locations are determined as a function of the inverse covariance matrix estimate and the source location to electrode transfer functions, in a manner which satisfies a linearly constrained minimum variance criterion.

USE/ADVANTAGE - Diagnosing number and location of intro-cerebral sources of **seizure** activity e.g. epilepsy to facilitate surgical intervention. Does not require knowledge of number of sources present.

Dwg.1/5

Title Terms: DETERMINE; LOCATE; INTRACEREBRAL; SOURCE; ELECTRIC; ACTIVE; ESTIMATE; DISTRIBUTE; NORMAL; POWER; FUNCTION; LOCATE; BRAIN; BANK; SPACE ; FILTER.

Index Terms/Additional Words: ELECTROENCEPHALOGRAPHIC; MEASUREMENT; EEG

Derwent Class: P31; S05; T01

International Patent Class (Main): A61B-005/0476 ; G06F-015/20;

G06F-017/00

File Segment: EPI; EngPI

9/5/13 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009014330 **Image available**

WPI Acc No: 1992-141666/199218

Related WPI Acc No: 1994-007124; 1996-009504; 1996-259512; 1998-062055; 2001-289391; 2001-366518; 2002-146549

XRPX Acc No: N92-105974

Optical imaging system for neurosurgery - identifies cortical areas on basis of stimulus evoked changes which occur in optical properties of brain

Patent Assignee: UNIV TECHNOLOGIES INT (UYTE-N)

Inventor: HOCHMAN D W; MACVICAR B A; WATSON T W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2048697	A	19920211	CA 48697	A	19910808	199218 B

Priority Applications (No Type Date): US 90565454 A 19900810

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CA 2048697	A	58		

Abstract (Basic): CA 2048697 A

The apparatus is for real time imaging of functional activity in cortical areas of a mammalian brain using intrinsic signals. The appts. enables dynamic, on-line imaging of, for example, a human brain during neurosurgery to permit more accurate identification of dysfunctional cortical areas.

Cortical areas are identified on the basis of stimulus evoked changes which occur in the optical properties of the brain so that real time localisation of seizure (e.g., **epileptic seizure**) foci and functional **mapping** can be observed during neurosurgery. Areas of pathological tissue such as epileptic foci and tumours can thus be identified and removed during neurosurgery without damaging important functional areas in the cortex near the tissue.

USE - For detecting cortical activity.

Dwg.1/6

Title Terms: OPTICAL; IMAGE; SYSTEM; NEUROSURGERY; IDENTIFY; CORTICAL; AREA ; BASIS; STIMULUS; CHANGE; OCCUR; OPTICAL; PROPERTIES; BRAIN

Derwent Class: S05; T01

International Patent Class (Main): A61B-006/00

International Patent Class (Additional): H04N-007/18
File Segment: EPI

9/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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008173332 **Image available**
WPI Acc No: 1990-060333/199009
XRPX Acc No: N90-046378

Local bio-electric current measurer for tissue complexes - performs correlation of signal patterns and templates for superimposed display of EEG and computer tomographic images

Patent Assignee: SIEMENS AG (SIEI)
Inventor: ABRAHAMFUC K; ROHRLEIN G; SCHNEIDER S; ABRAHAM-FUCHS K; ROEHRLEIN G

Number of Countries: 005 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 355506	A	19900228	EP 89114280	A	19890802	199009 B
US 4974602	A	19901204	US 89393895	A	19890815	199051
EP 355506	B1	19941214	EP 89114280	A	19890802	199503
DE 58908764	G	19950126	DE 508764	A	19890802	199509
			EP 89114280	A	19890802	

Priority Applications (No Type Date): DE 3827799 A 19880816
Cited Patents: 1.Jnl.Ref; US 4532591; US 4736751; US 4753246
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 355506	A	G	13		
Designated States (Regional): DE FR IT NL					
EP 355506	B1	G	18	A61B-005/0476	
Designated States (Regional): DE FR IT NL					
DE 58908764	G			A61B-005/0476	Based on patent EP 355506

Abstract (Basic): EP 355506 A

Signals from microelectrodes (1) and SQUID magnetometer sensors (2) distributed over a skullcap (3) pass through a multichannel digitiser (6) and frequency filter (9) to an EEG monitor (10) or programmable pattern recognition stage. These provide correlation (14) with stored templates (13) from which a correlation coefft. is worked out.

A threshold value definition stage (15) forwards useful signal patterns to a comparator (16). A mean-value stage (17) produces time-averages of selected concurrent and coincident signal patterns from which a localisation stage (18) derives the geometrical position of a pathological e-source of electrical activity for display (21).

USE/ADVANTAGE - For **locating** the seat of **epileptic** disturbance from electro- or magnetoencephalogram recordings. Definite pattern arising within a time interval can serve as a basis of search among continuous signals and establishment of their timing and spatial configuration.

Title Terms: LOCAL; BIO; ELECTRIC; CURRENT; MEASURE; TISSUE; COMPLEX; PERFORMANCE; CORRELATE; SIGNAL; PATTERN; TEMPLATE; SUPERIMPOSED; DISPLAY; EEG; COMPUTER; TOMOGRAPHY; IMAGE

Derwent Class: P31; P34; S05

International Patent Class (Main): A61B-005/0476

International Patent Class (Additional): A61B-005/04 ; A61N-005/04
File Segment: EPI; EngPI

9/5/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007909068 **Image available**
WPI Acc No: 1989-174180/198924
XRPX Acc No: N89-132971

Electrical connector for multi-electrode brain-contact device - has lead wires extending to terminal mount and to array of terminals, and conductor support

Patent Assignee: AD-TECH MEDICAL INSTR CORP (ADTE-N)

Inventor: PUTZ D A

Number of Countries: 012 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 319844	A	19890614	EP 88120053	A	19881201	198924 B
US 4850359	A	19890725	US 87128797	A	19871204	198937
US 4869255	A	19890926	US 88218161	A	19880713	198948
CA 1325831	C	19940104	CA 584511	A	19881130	199407
EP 319844	B1	19941130	EP 88120053	A	19881201	199501
DE 3852279	G	19950112	DE 3852279	A	19881201	199507
			EP 88120053	A	19881201	

Priority Applications (No Type Date): US 88218161 A 19880713; US 87109111 A 19871016; US 87128797 A 19871204

Cited Patents: CA 1065969; FR 2418554; US 3665129; US 3860312; US 4469104

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 319844	A	E	20		
Designated States (Regional): AT BE CH DE ES FR GB IT LI SE					
US 4850359	A		13		
US 4869255	A		10		
EP 319844	B1	E	24	A61B-005/04	
Designated States (Regional): AT BE CH DE ES FR GB IT LI SE					
DE 3852279	G			A61B-005/04	Based on patent EP 319844
CA 1325831	C			A61N-001/05	

Abstract (Basic): EP 319844 A

The electrical connection device (10) for coupling lead wires (16) with individual conductors, has the lead wires extending to a terminal mount and to an array of lead-wire terminals on and forming a part of the terminal mount. A conductor support holds the individual conductors in a conductor array.

A connector block has a space and an array of second spaces each intersecting the first space. The first space receives the terminal mount and the array of second spaces receives the conductor array. The connector block, terminal mount and conductor array are configured and arranged so that the lead-wire terminals and individual conductors are held in engagement by mechanical interference.

USE/ADVANTAGE - Facilitates surgical procedures used in locating epileptogenic foci.

1/18

Title Terms: ELECTRIC; CONNECT; MULTI; ELECTRODE; BRAIN; CONTACT; DEVICE;

LEAD; WIRE; EXTEND; TERMINAL; MOUNT; ARRAY; TERMINAL; CONDUCTOR; SUPPORT
Derwent Class: P31; P34; S05; V04
International Patent Class (Main): A61B-005/04 ; A61N-001/05
International Patent Class (Additional): H01R-021/22
File Segment: EPI; EngPI

9/5/16 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007500231 **Image available**
WPI Acc No: 1988-134164/198820
XRPX Acc No: N88-102094

Mapping electrical activity of brain - plotting elements of expanded matrix derived from input data matrices based on signals from four activity sensors

Patent Assignee: SPOLDZIELNIA PRACY (SPOL-N)
Inventor: ACHIMOWICZ J; MISZCZAK J; ZAJAC J
Number of Countries: 003 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3734829	A	19880511	DE 3734829	A	19871014	198820 B
FR 2604889	A	19880415				198822
HU 44923	T	19880530				198825

Priority Applications (No Type Date): PL 261893 A 19861014

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3734829	A		16		

Abstract (Basic): DE 3734829 A

Input data matrices are formed from brain activity signals. The values of the individual elements in an expanded matrix with a larger number of elements than the number of activity sensors are generated from four values (21-24) of the input data matrix corresponding to the four sensors. The sensors are arranged to form the smallest possible parallelogram contg. an expanded matrix element. The latter is linked to four coeffts. (C1-C4) which are the coordinate functions (X,Y) of the four sensors and the point linked with the expanded matrix element Zp, whereby $Z_p = C1 \times Z1 + C2 \times Z2 + C3 \times Z3 + C4 \times Z4$.

USE/ADVANTAGE - Can locate epileptic centres, centres of damage of different kinds, can detect functional disturbances preceded by structional changes and allows monitoring of intrapsychic trend phenomena in macro and micro time scales.

Title Terms: MAP; ELECTRIC; ACTIVE; BRAIN; PLOT; ELEMENT; EXPAND; MATRIX; DERIVATIVE; INPUT; DATA; MATRIX; BASED; SIGNAL; FOUR; ACTIVE; SENSE

Derwent Class: P31; S05

International Patent Class (Additional): A61B-005/04

File Segment: EPI; EngPI

9/5/17 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004116210

WPI Acc No: 1984-261751/198442

XRPX Acc No: N84-195535

Epilepsy diagnosis - active electrodes on face, on projection of branches of trigeminal nerve

Patent Assignee: RACHKOV B M (RACH-I)

Inventor: KHATCHARTY V A; ROGULOV V A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1074484	A	19840223	SU 3336960	A	19810819	198442 B

Priority Applications (No Type Date): SU 3336960 A 19810819

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 1074484	A		2		

Abstract (Basic): SU 1074484 A

Epilepsy diagnosis involves recording brain biopotentials from symmetrical parts of the head. Active elements are positioned on the projections of the emergence of the trigeminal nerve branches, a constant potential differential in the range of 2.5-5.0 mV established between the indifferent and each

" active electrode, and reversible changes in current value in the circuit measured recorded. 80-220 Hertz waves on a 40-50 Hertz background indicate epilepsy. On the side of the epileptic focus the changes in bioelectrical activity are more marked. The focus is located by the degree of change in biopotentials.

USE - To **locate** the **epileptic** focus, during neuro-surgery, peuro-pathology psychiatry and electro physiology. Bul.7/23.2.84. (2pp Dwg.No.0/0)

Title Terms: EPILEPSY; DIAGNOSE; ACTIVE; ELECTRODE; FACE; PROJECT; BRANCH; NERVE

Derwent Class: P31; S05

International Patent Class (Additional): A61B-005/04

File Segment: EPI; EngPI

9/5/18 (Item 18 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003847199

WPI Acc No: 1983-843449/198350

XRPX Acc No: N83-223617

Epileptic focus location method - by intersection of two directions of spread of pathological activity in cortex

Patent Assignee: KHARK NEUROLOGY (KHNE-R)

Inventor: CHERNENKOV V G; MERTSALOV V S; VOLOSHIN P V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 997655	A	19830223				198350 B

Priority Applications (No Type Date): SU 2859288 A 19791114

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 997655	A		2		

Abstract (Basic): SU 997655 A

After trepanation and opening the dura mater a system of corticographic electrodes is applied to the exposed zone of the cortex. Silver electrodes can be used for taking corticographic potentials. The number of commutation canals is distributed between the electrodes in such a way that each electrode is commutated with at least three other electrodes. After the first application of the electrodes, the electrode in the system which is nearest to the epileptic focus is determined by the analysis of the simultaneity of the appearance of epileptic activity in the commutation pairs. This determines the direction of situation of the epileptic focus.

A second electrode system application analysing the simultaneous appearance of epileptic activity in commutation pairs detects another direction of situation of the **epileptic** focus, whose central zone is **located** by the two directions' intersection. The focus is located by applying electrodes at an additional point. Bul.7/23.2.83 (2pp Dwg.No.0/0)

Title Terms: EPILEPSY; FOCUS; LOCATE; METHOD; INTERSECT; TWO; DIRECTION; SPREAD; PATHOLOGICAL; ACTIVE; CORTEX

Derwent Class: P31; S05

International Patent Class (Additional): A61B-005/00

File Segment: EPI; EngPI

X 9/5/19 (Item 19 from file: 347)

DIALOG(R)File 347:JAPIO

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06186715 **Image available**
ULTRASONIC OPERATION DEVICE

PUB. NO.: 11-128265 [JP 11128265 A]
PUBLISHED: May 18, 1999 (19990518)
INVENTOR(s): SUZUKI KIMINOBU
APPLICANT(s): K VISION KK
WHITE MEDICAL KK
APPL. NO.: 09-326869 [JP 97326869]
FILED: October 23, 1997 (19971023)
INTL CLASS: A61F-009/007 ; A61B-017/36

ABSTRACT

PROBLEM TO BE SOLVED: To suppress perfusate flow along the tip end part of a chip smaller to eliminate relief of a nucleus of lens to enable to efficiently execute crushing of the nucleus of lens, by reducing the inner diameter of the tip end part of a sleeve to be formed into an almost same dimension of the outline of the chip.

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X 9/5/20 (Item 20 from file: 347)

DIALOG(R)File 347:JAPIO

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03568749 **Image available**
ULTRASONIC THREE-DIMENSIONAL IMAGE DISPLAY

PUB. NO.: 03-231649 [JP 3231649 A]
PUBLISHED: October 15, 1991 (19911015)
INVENTOR(s): HIROSE MASANORI
MOCHIZUKI TAKESHI
APPLICANT(s): ALOKA CO LTD [470034] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 02-027646 [JP 9027646]
FILED: February 06, 1990 (19900206)
INTL CLASS: [5] **A61B-008/00** ; H04N-007/18
JAPIO CLASS: 28.2 (SANITATION -- Medical); 44.6 (COMMUNICATION --
Television)
JAPIO KEYWORD: R007 (ULTRASONIC WAVES)
JOURNAL: Section: C, Section No. 900, Vol. 16, No. 6, Pg. 50, January
09, 1992 (19920109)

ABSTRACT

PURPOSE: To facilitate visual determination of a sense of distance and a positional relationship between a test specimen and an observer by determining a distance of the test specimen from an observing position based on three-dimensional image information to display a three-dimensional color image with the addition of specified hue information corresponding to the distance.

Set	Items	Description
S1	20614	SEIZ? OR EPILEP? OR ANTIEPILEP?
S2	932871	COOL? OR PELTIER?
S3	1129808	MAP? ? OR MAPPING? ? OR MAPPED OR LOCAT? OR IDENTIF? OR FI- ND? ?
S4	677	S1(S)S2
S5	120	S1(5N)S3
S6	796	S5 OR S4
S7	20	S6 AND IC=(A61F OR A61B)
S8	20	IDPAT (sorted in duplicate/non-duplicate order)
S9	20	IDPAT (primary/non-duplicate records only)

? show files

File 347:JAPIO Oct 1976-2002/Aug(Updated 021203)
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File 350:Derwent WPIX 1963-2002/UD,UM &UP=200282
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File 371:French Patents 1961-2002/BOPI 200209
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4/5/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00956003 **Image available**

SYSTEM AND METHOD FOR COOLING THE CORTEX TO TREAT NEOCORICAL SEIZURES
SYSTEME ET PROCEDE DE REFROIDISSEMENT DU CORTEX DESTINES A TRAITER DES
CRISES NEOCORTICALES

Patent Applicant/Assignee:

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Inventor(s):

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200289685 A2 20021114 (WO 0289685)

Application: WO 2002US14109 20020503 (PCT/WO US0214109)

Priority Application: US 2001288944 20010504

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61B-018/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7862

English Abstract

A manually activated Peltier device was placed in direct contact with a cortical slice. Seizures terminated within seconds of the onset of cooling, sometimes preceding a detectable drop in temperature measured near the top of the slice. Activation of the Peltier did not stop seizures when slices were no longer in direct physical contact with the device, indicating that this was not a field effect. When cooling was shut off and temperature returned to 33 degreesC, the bursting sometimes returned, but a longer term suppressive effect on seizure activity could be observed. In two experiments, a custom computer program automatically detected seizure discharges and triggered a TTL pulse to activate the Peltier. In these experiments the Peltier automatically terminated the slice bursting in less than four seconds. When the Peltier device was placed in contact with the normal, exposed cortex of a newborn pig, we found that the cortical temperature rapidly decreased from 36 degreesC to as low as 26 degreesC, at a depth of 1.7 mm below the cooling unit. Therefore, local cooling may rapidly terminate focal paroxysmal discharges and might be adapted for clinical practice.

Legal Status (Type, Date, Text)

Publication 20021114 A2 Without international search report and to be
republished upon receipt of that report.

Set	Items	Description
S1	4	E3,E10
S2	4	IDPAT (sorted in duplicate/non-duplicate order)
S3	4	IDPAT (primary/non-duplicate records only)
S4	1	S3 AND EPILEPSY

? show files

File 347:JAPIO Oct 1976-2002/Aug(Updated 021203)

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File 348:EUROPEAN PATENTS 1978-2002/Dec W02

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File 349:PCT FULLTEXT 1979-2002/UB=20021219,UT=20021212

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File 350:Derwent WPIX 1963-2002/UD,UM &UP=200282

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